
Chorispora tashkorganica (Brassicaceae), a New Species from Xinjiang, China

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ABSTRACT. *Chorispora tashkorganica*, a narrow endemic to western Xinjiang, China, is described and illustrated. Its relationships and distinguishing characters are discussed.

During work on the genus *Chorispora* R. Brown for the forthcoming volume eight of the *Flora of China*, we examined all of the recognized species except the two described by Pachomova (1974) from central Asia. However, on the basis of the detailed original descriptions she gave, it appears that *Chorispora pamirica* Pachomova and *C. insignis* Pachomova are synonyms of *C. songarica* Schrenk and *C. sibirica* (L.) DC., respectively. Among the extensive Chinese material we examined, two collections clearly belong to an undescribed species, hereafter known as *C. tashkorganica*. Regardless of the ultimate placement of Pachomova's two taxa, they are quite different from the new species in having obovate petals 10–12 mm long, compared to the much shorter (3–4 mm long) oblanceolate petals of *C. tashkorganica*.

As presently delimited, *Chorispora* consists of 11 species centered primarily in central and southwestern Asia, with the range of one weedy species, *C. tenella* (Pallas) DC., extending throughout Europe and introduced elsewhere in the world. The 11 species of *Chorispora* are easily separated by the following key.

- 1a. Plants perennial with a caudex; flowering stems leafless or rarely 1-leaved.
 - 2a. All flowers on solitary pedicels arising from rosette
. *C. bungeana* Fischer & C. A. Meyer
 - 2b. Flowers always in racemes.
 - 3a. Flowers purple.
 - 4a. Sepals 3–4 mm long; petals 6–10 mm long; pedicel 0.3–1(–1.5) cm long; fruiting style

- 1.5–3 mm long
. *C. sabulosa* Cambessèdes
- 4b. Sepals 6–7 mm long; petals 15–18 mm long; pedicel (1.7–) 2–3.5(–5.5) cm long; fruiting style 5–7 mm long
. *C. greigii* Regel
- 3b. Flowers yellow.
 - 5a. Leaves pinnatisect; petals 12–15 × 5–7 mm; sepals oblong, 5.5–7 mm long
. *C. songarica* Schrenk
 - 5b. Leaves subentire, sinuate-dentate, to pinnatifid; petals 5–8(–10) × 2–4 mm; sepals ovate, 2–3(–3.5) mm long
. *C. macropoda* Trautvetter
- 1b. Plants annual; flowering stems leafy.
 - 6a. Flowers yellow.
 - 7a. Petals narrowly oblanceolate, 3–4 × 0.7–1 mm, rounded at apex; anthers 0.5–0.9 mm long; style 2–4 mm long in fruit; fruiting pedicels suberect to ascending, subappressed
. *C. tashkorganica* Al-Shehbaz et al.
 - 7b. Petals broadly obovate, 6–20 × 3–7 mm, apex emarginate; anthers 1.5–2 mm long; style 5–25 mm long in fruit; fruiting pedicels divaricate to recurved.
 - 8a. Petals 6–9(–12) mm long; fruit 1.5–2 cm × 1–1.5(–2) mm; style 5–9 mm long; fruiting pedicels (6–)7–10(–14) mm long *C. sibirica* (L.) DC.
 - 8b. Petals 10–18(–20) mm long; fruit 2–3(–4) cm × 2.5–3.5(–5) mm; style 10–18(–25) mm long; fruiting pedicels 3–5 mm long
. *C. iberica* (Bieberstein) DC.
 - 6b. Flowers purple.
 - 9a. Petals oblanceolate, 8–10(–12) mm long; sepals 3–5(–6) mm long
. *C. tenella* (Pallas) DC.
 - 9b. Petals broadly obovate, (12–)14–

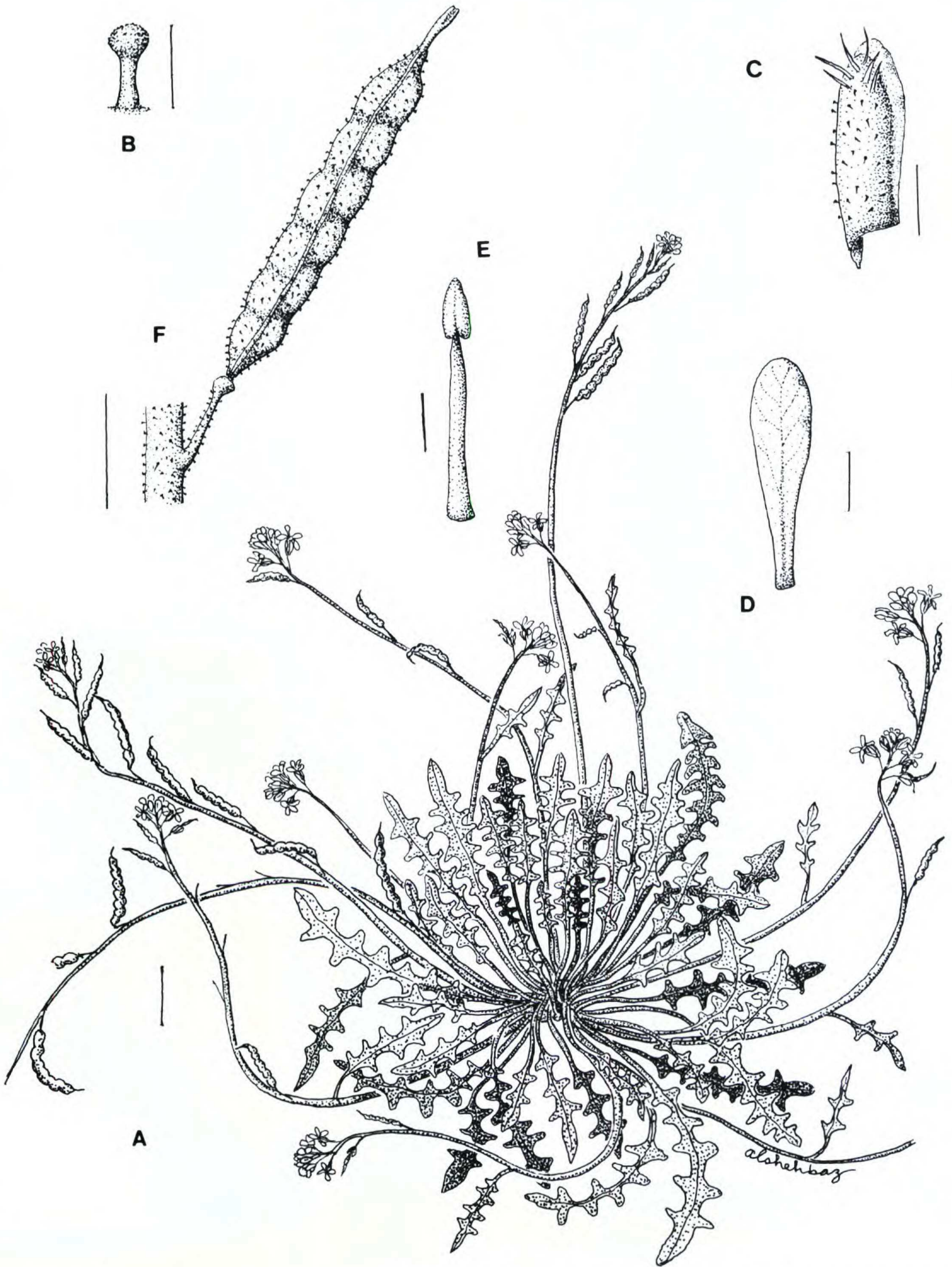


Figure 1. *Chorispora tashkorganica* Al-Shehbaz, T. Y. Cheo, L. L. Lu & G. Yang. —A. Plant. —B. Gland. —C. Sepal. —D. Petal. —E. Median stamen. —F. Fruit and pedicel. Scale: A = 1 cm; B = 0.1 mm; C–E = 1 mm; F = 5 mm. Drawn by Al-Shehbaz from the holotype.

- 18(–20) mm long; sepals 7–10 mm long.
- 10a. Fruiting style much longer than fruit, curved distally; fruit excluding style ca. 1 cm long *C. persica* Boissier
- 10b. Fruiting style at most as long as fruit, straight; fruit excluding style 1.5–3 cm long
 *C. purpurascens*
 (Banks & Solander) Eig

Chorispora tashkorganica Al-Shehbaz, T. Y. Cheo, L. L. Lu & G. Yang, sp. nov. TYPE: China. Xinjiang: Taxkorgan (pronounced as Tashkorgan), Subashi, 4000 m, 30 June 1987, *Qinghai-Tibet Team 870314* (holotype, KUN). Figure 1.

Herba annua glandulosa; caules 12–20 cm longi; folia basalia rosulata, numerosa, petiolata, pinnatisecta vel sinuato-dentata, lobis lateralibus deltoideis; pedicelli fructiferi suberecti vel adscendentes, subapressi, glandulosi, 1.5–3 mm longi; sepala ovata, 2–3 mm longa; petala lutea, 3–4 × 0.7–1 mm, oblanceolata, apice rotundata; fructus cylindrico-lineari, 1.2–1.5 cm × 1.5–2 mm, glandulosi, valde torulosi, articulis lateralibus 5–8; stylus 2–4 mm longus; semina oblonga, ca. 1.4 × 1 mm.

Herbs annual, 12–20 cm tall, densely glandular throughout, sparsely pubescent at apices of sepals and lobes of young leaves with simple trichomes to 1 mm long, glabrous elsewhere. Stems several from base, decumbent, unbranched. Basal leaves rosulate; petiole 0.5–2.5 cm long, not ciliate, expanded at base; leaf blade linear to linear-lanceolate in outline, 1–5 cm × 1–10 mm, densely glandular, base attenuate, margin pinnatisect to sinuate-dentate, apex acute; lateral lobes deltate, acute, smaller

than terminal lobe. Cauline leaves few, similar to basal ones but with fewer lobes. Flowers in racemes, elongated considerably in fruit. Fruiting pedicel 1.5–3 mm long, glandular, ascending to suberect, subappressed. Sepals yellowish, ovate, 2–3 × ca. 1 mm, glandular, margin membranous. Petals yellow, 3–4 × 0.7–1 mm; blade oblanceolate, rounded at apex; claw 2–2.5 mm long. Filaments 2–3 mm long; anthers oblong, 0.5–0.9 mm long. Fruit cylindric-linear, 1.2–1.5 cm × 1.5–2 mm (excluding style), corky, strongly torulose and with 5 to 8 lateral articulations on each side, glandular; style 2–4 mm long. Seeds brown, oblong, ca. 1.4 × 1 mm. Flowering and fruiting June–July.

Chorispora tashkorganica is known thus far only from rocky slopes at 4000–4200 m in Taxkorgan Xian, Xinjiang. It is most closely related to *C. sibirica* and *C. iberica*, both of which are also annuals with yellow flowers. The new species is readily separated by its smaller petals and anthers, shorter styles, and appressed, suberect to ascending vs. divaricate fruiting pedicels (see key).

Paratype. CHINA. **Xinjiang:** Taxkorgan, Majin, rocky slope, 4200 m, 3 July 1987, *Qinghai Tibet Team 870405* (KUN).

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